

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Margolis, Benjamin L.
- (ii) TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATMENT OF BREAST CANCER

(iii) NUMBER OF SEQUENCES: 21

(iv) CORRESPONDENCE ADDRESS:

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- (D) STATE: New York
- (E) COUNTRY: U.S.A.
- (F) ZIP: 10036-2711

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

- (A) APPLICATION NUMBER: US 08/207,575
- (B) FILING DATE: 07-MAR-1994
- (C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

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(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 6 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Gly Xaa Gly Xaa Xaa Gly
1 5

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 4 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Val Ala Val Lys
1

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 5 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Gly Met Xaa Tyr Leu
1 5

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 9 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Ile His Arg Asp Leu Ala Ala Arg Asn
1 5

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 6 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Lys Trp Met Ala Pro Glu
1 5

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 6 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Lys Trp Thr Ala Pro Glu
1 5

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 6 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Phe Trp Tyr Ala Pro Glu
1 5

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 7 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Ser Asp Val Trp Ser Phe Gly
1 5

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 334 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Arg Asp Ser Ser Arg Leu Cys Val Val Lys Val Tyr Ser Glu Asp Gly
1 5 10 15

Ala Cys Arg Ser Val Glu Val Ala Ala Gly Ala Thr Ala Arg His Val
20 25 30

Cys Glu Met Leu Val Gln Arg Ala His Ala Leu Ser Asp Glu Ser Trp
35 40 45

Gly Leu Val Glu Ser His Pro Tyr Leu Ala Leu Glu Arg Gly Leu Glu
50 55 60

Asp His Glu Phe Val Val Glu Val Gln Glu Ala Trp Pro Val Gly Gly
65 70 75 80

Asp Ser Arg Phe Ile Phe Arg Lys Asn Phe Ala Lys Tyr Glu Leu Phe
85 90 95

Lys Ser Pro Pro His Thr Leu Phe Pro Glu Lys Met Val Ser Ser Cys
100 105 110

Leu Asp Ala Gln Thr Gly Ile Ser His Glu Asp Leu Ile Gln Asn Phe
115 120 125

Leu Asn Ala Gly Ser Phe Pro Glu Ile Gln Gly Phe Leu Gln Leu Arg

130	135	140
Gly Ser Gly Arg Gly Ser Gly Arg Lys Leu Trp Lys Arg Phe Phe Cys		
145	150	155
Phe Leu Arg Arg Ser Gly Leu Tyr Tyr Ser Thr Lys Gly Thr Ser Lys		
165	170	175
Asp Pro Arg His Leu Gln Tyr Val Ala Asp Val Asn Glu Ser Asn Val		
180	185	190
Tyr Val Val Thr Gln Gly Arg Lys Leu Tyr Gly Met Pro Thr Asp Phe		
195	200	205
Gly Phe Cys Val Lys Pro Asn Lys Leu Arg Asn Gly His Lys Gly Leu		
210	215	220
His Ile Phe Cys Ser Glu Asp Glu Gln Ser Arg Thr Cys Trp Leu Ala		
225	230	235
Ala Phe Arg Leu Phe Lys Tyr Gly Val Gln Leu Tyr Lys Asn Tyr Gln		
245	250	255
Gln Ala Gln Ser Arg His Leu Arg Leu Ser Tyr Leu Gly Ser Pro Pro		
260	265	270
Leu Arg Ser Val Ser Asp Asn Thr Leu Val Ala Met Asp Phe Ser Gly		
275	280	285
His Ala Gly Arg Val Ile Asp Asn Pro Arg Glu Ala Leu Ser Ala Ala		
290	295	300
Met Glu Glu Ala Gln Ala Trp Arg Lys Lys Thr Asn His Arg Leu Ser		
305	310	315
Leu Pro Thr Thr Cys Ser Gly Ser Ser Leu Ser Ala Ala Ile		
325	330	320

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 348 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Lys	Glu	Ala	Lys	Val	Thr	Lys	Ile	Phe	Val	Lys	Phe	Phe	Val	Glu	Asp
1				5					10					15	
Gly	Glu	Ala	Leu	Gln	Leu	Leu	Ile	Asp	Glu	Arg	Trp	Thr	Val	Ala	Asp
				20				25					30		
Thr	Leu	Lys	Gln	Leu	Ala	Glu	Lys	Asn	His	Ile	Ala	Leu	Met	Glu	Asp
					35		40					45			
His	Cys	Ile	Val	Glu	Glu	Tyr	Pro	Glu	Leu	Tyr	Ile	Lys	Arg	Val	Tyr
				50		55					60				
Glu	Asp	His	Glu	Lys	Val	Val	Glu	Asn	Ile	Gln	Met	Trp	Val	Gln	Asp
				65		70				75			80		
Ser	Pro	Asn	Lys	Leu	Tyr	Phe	Met	Arg	Arg	Pro	Asp	Lys	Tyr	Ala	Phe

85	90	95	
Ile Ser Arg Pro Glu Leu Tyr Leu Leu Thr Pro Lys Thr Ser Asp His			
100	105	110	
Met Glu Ile Pro Ser Gly Asp Gln Trp Thr Ile Asp Val Lys Gln Lys			
115	120	125	
Phe Val Ser Glu Tyr Phe His Arg Glu Pro Val Val Pro Pro Glu Met			
130	135	140	
Glu Gly Phe Leu Tyr Leu Lys Ser Asp Gly Arg Lys Ser Trp Lys Lys			
145	150	155	160
His Tyr Phe Val Leu Arg Pro Ser Gly Leu Tyr Tyr Ala Pro Lys Ser			
165	170	175	
Lys Lys Pro Thr Thr Lys Asp Leu Thr Cys Leu Met Asn Leu His Ser			
180	185	190	
Asn Gln Val Tyr Thr Gly Ile Gly Trp Glu Lys Lys Tyr Lys Ser Pro			
195	200	205	
Thr Pro Trp Cys Ile Ser Ile Lys Leu Thr Ala Leu Gln Met Lys Arg			
210	215	220	
Ser Gln Phe Ile Lys Tyr Ile Cys Ala Glu Asp Glu Met Thr Phe Lys			
225	230	235	240
Lys Trp Leu Val Ala Leu Arg Ile Ala Lys Asn Gly Ala Glu Leu Leu			
245	250	255	
Glu Asn Tyr Glu Arg Ala Cys Gln Ile Arg Arg Glu Thr Leu Gly Pro			
260	265	270	
Ala Ser Ser Met Ser Ala Ala Ser Ser Ser Thr Ala Ile Ser Glu Val			
275	280	285	
Pro His Ser Leu Ser His His Gln Arg Thr Pro Ser Val Ala Ser Ser			
290	295	300	
Ile Gln Leu Ser Ser His Met Met Asn Asn Pro Thr His Pro Leu Ser			
305	310	315	320
Val Asn Val Arg Asn Gln Ser Pro Ala Ser Phe Ser Val Asn Ser Cys			
325	330	335	
Gln Gln Ser His Pro Ser Arg Thr Ser Ala Lys Leu			
340	345		

(2) INFORMATION FOR SEQ ID NO:11:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 111 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown
- (ii) MOLECULE TYPE: protein
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1, 25-27, 32, 46, 47, 49, 52, 54, 72
75, 77, 93, 95, 105, 107, 108 and 111
 - (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Hydrophobic"

residues"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2, 21, 23 and 101
- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Basic residues"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3, 7, 9, 11-19, 22, 28-31, 36-42, 44, 48
50, 51, 53, 55-70, 74, 76, 78-90, 92, 94
96-98, 106 109 and 110
- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Non-consensus residues"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 24, 33-35 and 91
- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Aromatic residues"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 99, 100, 102 and 103
- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Acidic residues"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

Xaa Xaa Xaa Gly Phe Leu Xaa Lys Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Trp Xaa
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Xaa Gly Xaa Xaa Xaa
35 40 45

Xaa
50 55 60

Xaa Xaa Xaa Xaa Xaa Asn Xaa Phe Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65 70 75 80

Xaa
85 90 95

Xaa Xaa Xaa Xaa Xaa Xaa Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
100 105 110

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: protein

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1

- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Isoleucine or Valine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 2, 69 and 102
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Arginine or Lysine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Tyrosine or Tryptophan"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 7, 11-17, 22, 28, 29, 31, 33, 35, 38-42
46, 47, 50-52, 58-68, 70, 72, 74, 76-78
80-92, 96, 98, 109, 110
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Non-consensus residues"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 8, 9, 18 and 21
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Lysine or Arginine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 19
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Threonine or Serine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 24
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Tryptophan or Tyrosine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 26 and 57
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Valine or Isoleucine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 30
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Aspartic Acid or Glycine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 34
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Leucine or Tyrosine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 36
(D) OTHER INFORMATION: /label= Xaa

- /note= "Xaa = Tyrosine or Phenylalanine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 37
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Lysine or Glutamic Acid"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 55
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Cysteine or Valine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 56
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Glutamine or Glutamic Acid"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 71
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Asparagine or Histidine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 75 and 108
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Isoleucine or Leucine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 93
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Phenylalanine or Leucine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 94
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Glutamine or Alanine".
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 97
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Serine or Threonine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 102 and 103
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa at these positions = Glutamic Acid or Aspartic Acid"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 105
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Valine or Methionine"
- (ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 111

(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Alanine or Valine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

Ile Arg Glu Gly Tyr Leu Xaa Lys Lys Gly Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Lys Thr Trp Lys Xaa Arg Trp Phe Val Leu Xaa Xaa Asp Xaa Leu
20 25 30

Xaa Leu Xaa Tyr Lys Xaa Xaa Xaa Xaa Pro Lys Gly Xaa Xaa Pro
35 40 45

Leu Xaa Xaa Xaa Ser Val Cys Gln Val Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50 55 60

Xaa Xaa Xaa Xaa Arg Xaa Asn Xaa Phe Xaa Ile Xaa Xaa Xaa Asp Xaa
65 70 75 80

Xaa Phe Gln Ala Xaa
85 90 95

Ser Xaa Glu Glu Arg Glu Glu Trp Val Lys Ala Ile Xaa Xaa Ala
100 105 110

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Asp Leu Arg Ala Ala Asn
1 5

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 8 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Isoleucine or Valine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3
- (D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Lysine or Arginine"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(B) LOCATION: 5
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Threonine or Methionine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Pro Xaa Xaa Trp Xaa Ala Pro Glu
1 5

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 7 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 5
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Valine or Isoleucine"

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 7
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Valine or Isoleucine"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Xaa Pro Xaa Tyr Xaa Asn Xaa
1 5

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 10 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
(A) NAME/KEY: Modified-site
(B) LOCATION: 8
(D) OTHER INFORMATION: /label= Xaa
/note= "Xaa = Hydrophobic Residue"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Xaa Pro Xaa Xaa Pro Pro Pro Xaa Xaa Pro
1 5 10

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 7 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Pro Pro Val Pro Pro Arg Arg
1 5

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Asp Leu Arg Ala Ala Asn
1 5

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Asp Leu Ala Ala Arg Asn
1 5

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Phe Leu Ile Arg Glu Ser
1 5

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Phe Leu Val Arg Glu Ser
1 5